

available on the rig floor to fit the casing string being run in the hole;

(h) All required manual and remote-controlled kelly valves, drill-string safety valves, and comparable-type valves (*i.e.*, kelly-type valve in a top-drive system) must be essentially full-opening; and

(i) The drilling crew must have ready access to a wrench to fit each manual valve.

**§ 250.446 What are the BOP maintenance and inspection requirements?**

(a) You must maintain and inspect your BOP system to ensure that the equipment functions properly. The BOP maintenance and inspections must meet or exceed the provisions of Sections 17.10 and 18.10, Inspections; Sections 17.11 and 18.11, Maintenance; and Sections 17.12 and 18.12, Quality Management, described in API RP 53, Recommended Practices for Blowout Prevention Equipment Systems for Drilling Wells (incorporated by reference as specified in § 250.198). You must document how you met or exceeded the provisions of Sections 17.10 and 18.10, Inspections; Sections 17.11 and 18.11, Maintenance; and Sections 17.12 and 18.12, Quality Management, described in API RP 53, record the results of your BOP inspections and maintenance actions, and make the records available to BSEE upon request. You must maintain your records on the rig for 2 years from the date the records are created, or for a longer period if directed by BSEE;

(b) You must visually inspect your surface BOP system on a daily basis. You must visually inspect your subsea BOP system and marine riser at least once every 3 days if weather and sea conditions permit. You may use television cameras to inspect subsea equipment.

[76 FR 64462, Oct. 18, 2011, as amended at 77 FR 50893, Aug. 22, 2012]

**§ 250.447 When must I pressure test the BOP system?**

You must pressure test your BOP system (this includes the choke manifold, kelly valves, inside BOP, and drill-string safety valve):

(a) When installed;

(b) Before 14 days have elapsed since your last BOP pressure test. You must begin to test your BOP system before midnight on the 14th day following the conclusion of the previous test. However, the District Manager may require more frequent testing if conditions or BOP performance warrant; and

(c) Before drilling out each string of casing or a liner. The District Manager may allow you to omit this test if you didn't remove the BOP stack to run the casing string or liner and the required BOP test pressures for the next section of the hole are not greater than the test pressures for the previous BOP test. You must indicate in your APD which casing strings and liners meet these criteria.

**§ 250.448 What are the BOP pressure tests requirements?**

When you pressure test the BOP system, you must conduct a low-pressure and a high-pressure test for each BOP component. You must conduct the low-pressure test before the high-pressure test. Each individual pressure test must hold pressure long enough to demonstrate that the tested component(s) holds the required pressure. Required test pressures are as follows:

(a) *Low-pressure test.* All low-pressure tests must be between 200 and 300 psi. Any initial pressure above 300 psi must be bled back to a pressure between 200 and 300 psi before starting the test. If the initial pressure exceeds 500 psi, you must bleed back to zero and reinitiate the test.

(b) *High-pressure test for ram-type BOPs, the choke manifold, and other BOP components.* The high-pressure test must equal the rated working pressure of the equipment or be 500 psi greater than your calculated maximum anticipated surface pressure (MASP) for the applicable section of hole. Before you may test BOP equipment to the MASP plus 500 psi, the District Manager must have approved those test pressures in your APD.

(c) *High pressure test for annular-type BOPs.* The high pressure test must equal 70 percent of the rated working pressure of the equipment or to a pressure approved in your APD.

(d) *Duration of pressure test.* Each test must hold the required pressure for 5

## § 250.449

minutes. However, for surface BOP systems and surface equipment of a subsea BOP system, a 3-minute test duration is acceptable if you record your test pressures on the outermost half of a 4-hour chart, on a 1-hour chart, or on a digital recorder. If the equipment does not hold the required pressure during a test, you must correct the problem and retest the affected component(s).

### § 250.449 What additional BOP testing requirements must I meet?

You must meet the following additional BOP testing requirements:

- (a) Use water to test a surface BOP system;
- (b) Stump test a subsea BOP system before installation. You must use water to conduct this test. You may use drilling fluids to conduct subsequent tests of a subsea BOP system. You must perform the initial subsea BOP test on the seafloor within 30 days of the stump test.
- (c) Alternate tests between control stations and pods;
- (d) Pressure test the blind or blind-shear ram BOP during stump tests and at all casing points;
- (e) The interval between any blind or blind-shear ram BOP pressure tests may not exceed 30 days;
- (f) Pressure test variable bore-pipe ram BOPs against the largest and smallest sizes of pipe in use, excluding drill collars and bottom-hole tools;
- (g) Pressure test affected BOP components following the disconnection or repair of any well-pressure containment seal in the wellhead or BOP stack assembly;
- (h) Function test annular and ram BOPs every 7 days between pressure tests;
- (i) Actuate safety valves assembled with proper casing connections before running casing;
- (j) Test all ROV intervention functions on your subsea BOP stack during the stump test. Each ROV must be fully compatible with the BOP stack ROV intervention panels. You must also test and verify closure of at least one set of rams during the initial test on the seafloor through an ROV hot stab. You must submit test procedures, including how you will test each ROV intervention function, with your APD

## 30 CFR Ch. II (7–1–13 Edition)

or APM for BSEE District Manager approval. You must:

- (1) Ensure that the ROV hot stabs are function tested and are capable of actuating, at a minimum, one set of pipe rams, one set of blind-shear rams, and unlatching the Lower Marine Riser Package (LMRP);
- (2) Notify the appropriate BSEE District Manager a minimum of 72 hours prior to the stump test and initial test on the seafloor; and
- (3) Document all your test results and make them available to BSEE upon request;
- (k) Function test autoshear and deadman systems on your subsea BOP stack during the stump test. You must also test the deadman system and verify closure of at least one set of blind-shear rams during the initial test on the seafloor. When you conduct the initial deadman system test on the seafloor you must ensure the well is secure and, if hydrocarbons have been present, appropriate barriers are in place to isolate hydrocarbons from the wellhead. You must also have an ROV on bottom during the test.
- (1) You must submit test procedures with your APD or APM for District Manager approval. The procedures for these function tests must include documentation of the controls and circuitry of the system utilized during each test. The procedure must also describe how the ROV will be utilized during this operation.
- (2) You must document all your test results and make them available to BSEE upon request.

[76 FR 64462, Oct. 18, 2011, as amended at 77 FR 50893, Aug. 22, 2012]

### § 250.450 What are the recordkeeping requirements for BOP tests?

You must record the time, date, and results of all pressure tests, actuations, and inspections of the BOP system, system components, and marine riser in the driller's report. In addition, you must:

- (a) Record BOP test pressures on pressure charts;
- (b) Require your onsite representative to sign and date BOP test charts and reports as correct;
- (c) Document the sequential order of BOP and auxiliary equipment testing